



Modeling & Simulation Resource Repository Board of Directors Briefing

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Our Mission: Support Improved C4ISR Analysis

Develop and maintain databases of C4ISR-related studies, M&S tools, and points of contact to:

- Facilitate opportunities for consolidating C4ISR study efforts and leveraging past work effectively
- Promote reutilization of C4ISR modeling and simulation tools
- Help reduce C4ISR analytic costs



DSC Analytic Databases: The Concept

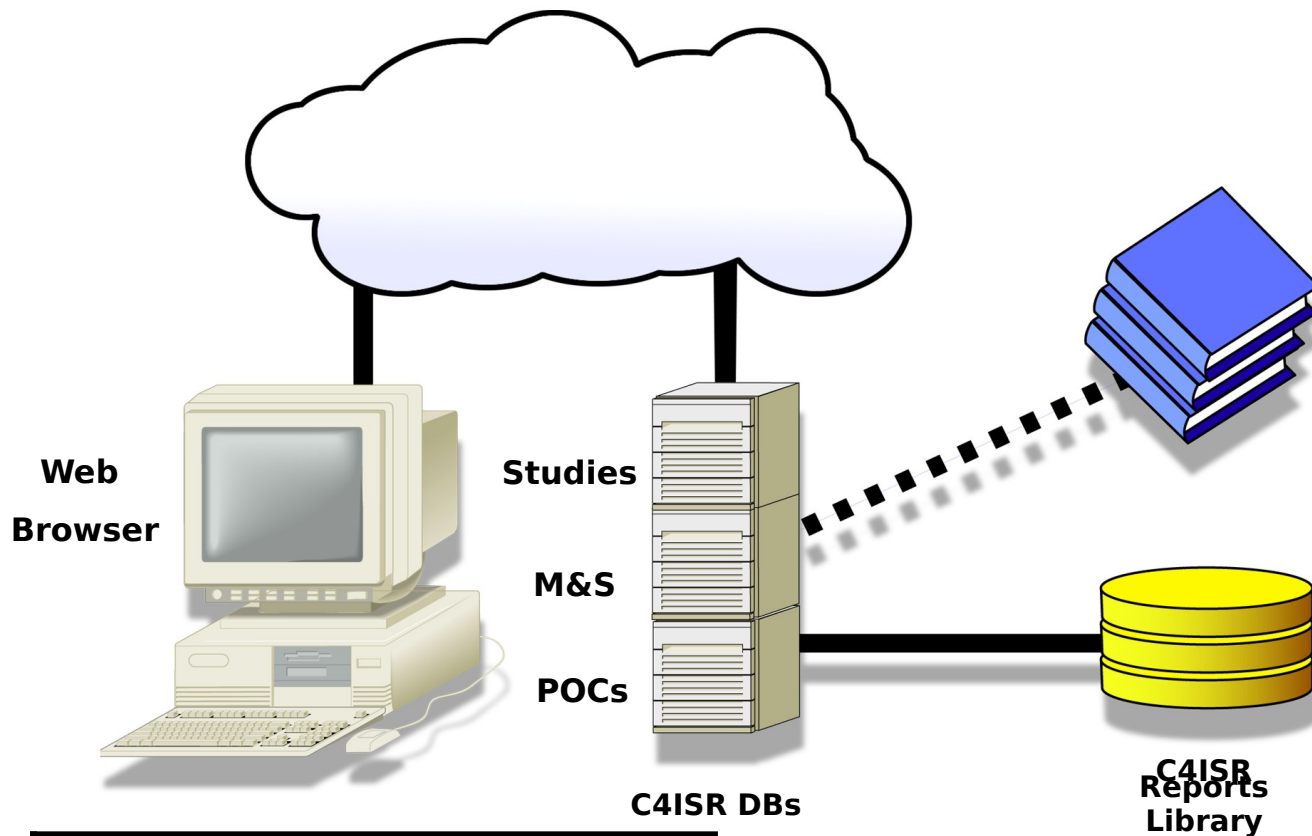
UNCLASS at www.dsc.osd.mil/ (Registration/Password

Required)

SECRET via **SIPRNET** at

206.36.143.34/DSC/index.html

SCI via **Intelink** at www.c3i.ic.gov



- 24 hour on-line availability
- Content matched to security access



Features of the DSC M&S Database

- Currently on-line on the WWW , SIPRNET; and Intelink
 - follow procedures on DSC homepage to obtain user ID and password (for WWW)
- M&S DB contains complete and detailed records on over 120 M&S tools -- object-oriented approach
- Linked at the record-to-record level with a DB of C4ISR-related studies -- provides insight on how tools are used
- Taxonomy contains general model information and C4ISR-specific assessment
- Includes several different search modalities and a “Consumer Reports” ranking of C4ISR functionality



DSC MSRR Concerns

- Maintain security of the information in studies database, while maintaining ability to link between studies and M&S databases
- Tracking usage of DSC Databases
- Maintaining unique C4ISR focus in record taxonomy and search capability in accordance with DSC mission
- Cost Impacts



DSC MSRR Concerns

- What is the minimum from user perspective?
 - Understand what sources of information are available and what each provides
 - Know what models are characterized in what databases
 - Ready ability to access model records



MSRR Options

OPTION 1

- **Maintain the Status Quo**

- Continue to provide direct access service to nodes/sites only
- **PROS:**
 - Each site maintains control of its own database
 - No additional cost to nodes/sites
 - Users currently familiar with structure
- **CONS:**
 - Separate efforts limits visibility and customer usage.
 - Viewed by user as disjointed activity
 - Too many username/passwords for users to remember
 - Each site operates differently



MSRR Options (Cont.)

OPTION 2

- **Create Simple Linkage Between Node Sites**
 - All sites have links to each other showing what additional data may be available at different sites
 - **PROS:**
 - Each site maintains control of their database
 - Allows customers to window shop for related web sites
 - Gets node visibility to a larger user community
 - Minimal cost to nodes/sites
 - **CONS:**
 - Requires maintaining updated links
 - Multiple usernames/passwords for users to remember
 - Each site operates differently



MSRR Options (Cont.)

OPTION 3

- **Federate All Nodes/Sites**

- A: Loose Federation: Sharing of username/passwords**

- **PROS:**

- Increases potential customer base through shared capabilities
 - Allows users to logon to multiple sites via single username/password

- **CONS:**

- Username/Passwords must be shared between nodes/sites
 - Username/Password scheme must all be compatible
 - Cost of implementation and operations to each node/site



MSRR Options (Cont.)

B: Tight Federation: Centralized management of user access

- **PROS:**
 - Increases potential customer base through shared capabilities
 - Simplifies efforts for users
 - Allows users to logon to multiple sites via single username/passwords
- **CONS:**
 - Requires central administration of username/passwords
 - » or standard username/password scheme
 - Moderate cost to DSC
 - Cost of implementation and operations to each node/site



Summary

- DSC Supports specific C4ISR analytical user requirements
 - Both M&S and Studies
 - C4ISR functional Model characterizations
- More than Repository of general Model information
 - Advanced search functions
 - C4ISR functional area Model with “Consumer Reports” ranking’s
- Willing to participate, but need to maintain characterized C4ISR focus



Back-up Slides



Features Of The DSC C4ISR Database

1 C4ISR Modeling & Simulation

- What We Are Doing
 - Characterize M&S Based on Standard C4ISR Schema
 - Electronic Characterization Tool
 - Currently Exceed 124 **VERIFIED** M&S Records
 - Four New Models Added per Month on Average
 - Not a Static Database, Records are Re-Verified
 - » High Value Models: Semi-Annually
 - » All Others: Annually
 - Characterizations **APPROVED** by Sponsoring Agency
 - 342 Models Identified with Relevant C4ISR Information
 - 114 Models Currently In Characterization Process
- How Is The Database Used?
 - “Consumer Reports”
 - View/Ranking
 - Object Oriented
 - User Friendly, Easily Searched



Features Of The DSC C4ISR Database (Cont.)

2 **C4ISR Studies**

- Provide Additional Insight on How Tools are Used
- Link Between M&S and Studies Databases
 - Allows User to Perform Research Between Databases
 - Links M&S With Studies That Used Them
 - Provides User with Insight Into Tool Suitability Across Applications
- Provides Point of Contact Lists for Each Tool